WHAT IS CLAIMED IS:

1.   A temperature detection method of a printing apparatus which prints by using a printhead, comprising:

5   a storage step of storing, in a nonvolatile memory, a previous printing time when the printhead has performed printing operation;

         a time acquisition step of acquiring a current time by using a timer which always performs time

10   counting operation by power supply from an auxiliary power supply capable of supplying power independently of a main power supply that supplies power for performing printing operation by the printing apparatus;

15   a calculation step of calculating a time elapsed after the previous printing time on the basis of the current time and the previous printing time;

         a comparison step of comparing the elapsed time and a predetermined time;

20   a measurement step of measuring a temperature by using a sensor arranged in at least either of the printing apparatus and the printhead in accordance with the comparison result at said comparison step; and

         an update step of updating a temperature on the

25   basis of the measured temperature.

2.   The method according to claim 1, wherein the

temperature includes at least either of an

environmental temperature of the printing apparatus and

a temperature of the printhead.

5   3.   The method according to claim 1, wherein at said

time acquisition step, a power-on time of the printing

apparatus is acquired using the timer.

4.   The method according to claim 3, wherein at said

10   calculation step, a time elapsed after power-on is

calculated from the power-on time and the current time.

5.   The method according to claim 4, wherein the

environmental temperature of the printing apparatus is

15   corrected in accordance with the time elapsed after

power-on.

6.   The method according to claim 1, further

comprising a determination step of determining whether

20   or not the printhead has been exchanged.

7.   The method according to claim 6, wherein a

temperature correction value of the printhead is so

controlled as to be updated in accordance with the

25   determination result at said determination step.

8.   The method according to claim 1, wherein

the main power supply includes an AC power supply

or a DC power supply, and

the auxiliary power supply includes a battery.

5   9.   The method according to claim 1, wherein the

printhead has a sensor for measuring a head

temperature.

10.   A printing apparatus which prints by using a

10   printhead, comprising:

a nonvolatile memory which stores a previous

printing time when said printhead has performed

printing operation;

a timer which always performs time counting

15   operation by power supply from an auxiliary power

supply capable of supplying power independently of a

main power supply that supplies power for performing

printing operation by said printing apparatus;

time acquisition means for acquiring a current

20   time by using said timer;

calculation means for calculating a time elapsed

after the previous printing time on the basis of the

current time acquired by said time acquisition means

and the previous printing time stored in said

25   nonvolatile memory;

comparison means for comparing the elapsed time

and a predetermined time;

measurement means for measuring a temperature by using a sensor arranged in at least either of said printing apparatus and said printhead in accordance with the comparison result by said comparison means;

5 and

update means for updating a temperature on the basis of the measured temperature.

11. A temperature detection method of a printing
10 apparatus which prints by using a printhead, comprising:

a storage step of storing, in a nonvolatile memory, a previous printing time when the printhead has performed printing operation;

15 a time acquisition step of acquiring an absolute current time;

a calculation step of calculating a time elapsed after the previous printing time on the basis of the absolute current time and the previous printing time;

20 a comparison step of comparing the elapsed time and a predetermined time;

a measurement step of measuring a temperature by using a sensor arranged in at least either of the printing apparatus and the printhead in accordance with
25 the comparison result at said comparison step; and

an update step of updating a temperature on the basis of the measured temperature.

12.   A printing apparatus which prints by using a
printhead, comprising:

a nonvolatile memory which stores a previous
5   printing time when the printhead has performed printing
operation;

time acquisition means for acquiring an absolute
current time;

calculation means for calculating a time elapsed
10   after the previous printing time on the basis of the
absolute current time acquired by said time acquisition
means and the previous printing time stored in said
nonvolatile memory;

comparison means for comparing the elapsed time
15   and a predetermined time;

measurement means for measuring a temperature by
using a sensor arranged in at least either of said
printing apparatus and said printhead in accordance
with a comparison result by said comparison means; and
20   update means for updating a temperature on the
basis of the measured temperature.